

之一^[16],因此我们进一步应用BACS量表对精神分裂症患者的认知功能进行评估,比较分析不同基因型精神分裂症患者的BACS量表得分。因为药物的使用可能对患者的认知功能产生影响,故我们选取未经治疗且能配合检查的首发精神分裂症患者作为研究对象。结果显示,AA基因型组首发精神分裂症患者在BACS量表语义流畅性测验分、字词流畅性测验分均显著高于GG基因型患者,差异有统计学意义,提示携带G等位基因的精神分裂症患者的语义流畅性测验、字词流畅性测验可能更差,CYBA基因A640G多态性位点G变异可能与首发精神分裂症患者的语义流畅性测验、字词流畅性测验方面认知损害有关。Wang等^[17]研究认为NADPH氧化酶激活导致患者大脑中间神经元氧化应激损伤而抑制性功能下降,为保持抑制与兴奋平衡状态,神经环路通过自我调整使兴奋性锥体神经元功能亦减退,谷氨酸及多巴胺等神经递质释放减少,导致患者出现认知功能缺陷症状。据此我们推测CYBA基因A640G多态性位点G变异导致NADPH氧化酶活性增加并生成更高浓度的活性氧,从而引起患者大脑中间神经元氧化应激损伤并最终表现出认知功能缺陷症状特别是言语流畅性障碍。

综上所述,CYBA基因A640G多态性虽然不能反映精神分裂症患者的发病风险,但可能与精神分裂症患者的认知缺陷内表型存在阳性关联。本研究的局限性在于:(1)进行BACS量表检查的首发精神分裂症患者样本量较小;(2)只对CYBA基因A640G一个遗传位点进行了研究,而精神分裂症是多基因遗传疾病。为了更加明确CYBA基因多态性与精神分裂症易感性、症状轻重及认知功能的关联,需要进一步开展多中心、更大样本量和多基因遗传位点与精神分裂症的相关性研究。

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